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Our Docket No.: 005545.P002

DEC 13 2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Collins

Application No.: 09/902,515

Filed: July 9, 2001

For: System and Method for Compressing
Data Using Field-Based Code Word
Generation

Examiner: Chen, Wenpeng

Art Group: 2624

APPEAL BRIEF
IN SUPPORT OF APPELLANT'S APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Sir:

Applicant (hereinafter "Appellant") hereby submits this Brief in support of its appeal from a final decision by the Examiner, mailed June 13, 2007, in the above-captioned case. Appellant respectfully requests consideration of this appeal by the Board of Patent Appeals and Interferences (hereinafter "Board") for allowance of the above-captioned patent application.

An oral hearing is not desired.

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Docket No. 005545.P002
Application No. 09/902,515

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I. REAL PARTY IN INTEREST

The invention is assigned to Good Technology, Inc., currently of 4250 Burton Dr, Santa Clara, California 95054.

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

III. STATUS OF THE CLAIMS

Claims 30-51 are currently pending in the above-referenced application. No claims have been allowed. All pending claims were rejected in the Final Office Action mailed June 13, 2007, and are the subject of this appeal.

All pending claims stand rejected under 35 U.S.C. § 103.

IV. STATUS OF AMENDMENTS

An Amendment After Final Action under 37 C.F.R. § 1.116 was submitted in response to the Final Office Action mailed on June 26, 2007. In response, the Examiner mailed an Advisory Action on July 6, 2007 maintaining the claim rejections. A copy of all claims on appeal is attached hereto as an Appendix of Claims.

V. SUMMARY OF THE INVENTION

In claim 30, a method is disclosed. The method includes receiving data at an interface from a service (See Specification at page 8, paragraph [0022]), identifying at the interface whether the data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book (See Specification at page 20, paragraphs [0047]), applying a first set of code words to encode data in the email message and applying a second set of code words to encode the address book data (See Specification at page 20, paragraphs [0047]).

Claim 43 includes a system having a service to provide messaging and groupware services and an interface (See Fig. 1 and Specification at page 8, paragraphs [0022] – [0021]), coupled to receive message data from the service. The interface includes a compression module to identify whether the message data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book (See Specification at page 20, paragraphs [0047]), apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data (See Specification at page 20, paragraphs [0047]).

Claim 48 includes a wireless processing device comprising a compression module to identify whether message data to be transmitted to a messaging service is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data (See Fig. 2 and Specification at page 8, paragraphs [0047]).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 30, 43 and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Carr, U.S. Patent No. 5,293,379 (*Carr*) in view of Togawa et al., U.S. Publication No. 2002/0004821 ("*Togawa*")

The remaining rejections in the Final Office Action rely on this rejection. Only this first rejection is to be reviewed.

VII. ARGUMENT

1. **THE PENDING CLAIMS 30, 43 AND 46 WERE IMPROPERLY REJECTED UNDER 35 U.S.C. § 103(A) BECAUSE THE COMBINATION OF *CARR* AND *TOGAWA* DOES NOT DISCLOSE OR SUGGEST EACH AND EVERY FEATURE OF THE PENDING CLAIMS**

Appellant respectfully submits that the embodiments disclosed in *Carr* and *Togawa* when combined fail to disclose or suggest the claimed invention for the reasons set forth below. As the Honorable Board is well aware, in order to establish a *prima facie* case of obviousness:

First, "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (Emphasis added). *In re Vaech*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Manual of Patent Examining Procedure (MPEP), 8th Edition, Revision 2, May 2004, §2143.

- (A) Claims 30, 43 and 46 were improperly rejected because the combination of *Carr* and *Togawa* does not disclose or suggest identifying whether data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book

The claims the present application each recite an element that is not disclosed in the combination *Carr* and *Togawa*. For example, Appellant's independent claim 30 recites the following:

A method comprising:
receiving data at an interface from a service;

identifying at the interface whether the data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book;

applying a first set of code words to encode data in the email message; and

applying a second set of code words to encode the address book data.

Appellant's independent claim 43 recites:

A system comprising:

a service to provide messaging and groupware services;

an interface, coupled to receive message data from the service, including a compression module to identify whether the message data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data.

Appellant's independent claim 48 recites:

A wireless processing device comprising a compression module to identify whether message data to be transmitted to a messaging service is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data.

Carr discloses a data processing system employing a compression method. See *Carr* at Abstract. The method includes reformatting each data packet in the data processing system by associating its static fields with a first packet region and its dynamic fields with a second packet region. The process then assembles a static table that includes static information from at least an initial data packet's first packet region. It then identifies static field information in a subsequent data packet's first packet region that is common to the information in the static table. Such common information is

encoded so as to reduce its data length. The common static information is then replaced in the modified data packet with the encoded common static information and the modified data packet is then transmitted. A similar action occurs with respect to user-data information. A single dictionary table is created for all packet headers, while separate dictionary tables are created for each user-data portion of a packet-type experienced in the communication network thereby enabling better compression. Id.

Togawa discloses a mail system equipped with a mail address manager for managing a mail address or addresses of one or more destinations. When a mail address of a particular destination is updated, the mail address manager registers the old mail address of the particular destination and a new mail address in correlation with each other. The result is that, even when the mail address of an intended destination has been updated, a mail source can proceed to send an e-mail, which is addressed to the intended destination at the old mail address, exactly to the intended destination without checking whether the mail address of the intended destination has been updated. Also at the mail source, it is possible to send an e-mail exactly to an intended destination without checking a restriction on a system environment of the intended destination. See *Togawa* at Abstract.

Appellant submits that neither *Carr* nor *Togawa* disclose or suggest a process of identifying whether data is an email message corresponding to a user mailbox or address book data corresponding to a user address book. Particularly, neither reference discloses or suggests identifying whether data is an email message or address book data. In the Final Office Action, the Examiner maintains that *Carr* discloses such a feature at col. 6, ll. 64 – col. 7, ll. 46. See Final Office Action at page 2, paragraph 4.

The passage relied upon by the Examiner recites:

Thus, given the above packet data fields and their essential characteristics, the invention reorders them by segregating them as follows: static; recalculatable; semi-static; and dynamic. The reordered fields occupy the same memory space as the original packet header. The static, recalculatable, and semi-static fields are then compressed using a modified LZW protocol with a dictionary table that is created specifically for the header data. Compression continues into the dynamic fields until the first incompressible field is encountered, at which point the remainder of the dynamic fields are not encoded, but are sent through as unencoded eight bit data. Then, the type field of the LAN packet is used to select a "user-data" LZW dictionary, which dictionary is used to compress the user-data portion of the LAN packet. At the end of the packet, a bit is appended that indicates whether the user data field has been compressed. While it is preferred to use the LZW algorithm, the compression of reformatted packet fields can be done using other string compression algorithms.

Turning now to FIG. 5, a reformatted TCP/IP packet is shown wherein the various categories of header fields have been moved within the packet to segregate static, semi-static and dynamic fields; and user data fields. The recalculatable fields have been zeroed, and the sequence and acknowledgement number most significant words (MSW) segregated into the static region of the packet. The identification, sequence, and acknowledgement fields have been segregated into most and least significant portions, with the former being placed in the static region and the latter in the dynamic region.

Once the packet is reformatted, as shown in FIG. 5, it is ready to be compressed using an appropriate string compression algorithm. During compression, individual dictionary tables (see FIG. 6) will be employed. One is derived specifically for the header data, while the remaining are for user-data appearing in specific types of protocol packets. For instance, if a TCP protocol is found, a separate TCP user-data dictionary will be created. Likewise, if ICMP, UDP, or LAT protocol packets are detected, they too will have individual user data dictionaries created and will be utilized for succeeding protocol packets of an identical packet type. The segregation of static data into one area of the packet enables substantially improved compression to

occur. Furthermore, the use of individual user-data dictionaries for sequences of identical packet types improves the probability that user data appearing in succeeding packets will be efficiently compressed.

Appellant respectfully submits that nowhere in the above-passage is there disclosed, or reasonably suggested, a process of *identifying whether data is an email message or address book data*. Specifically, the passage fails to disclose or suggest a process of distinguishing as to whether data is email message or address book data. In fact, there is no discussion of the term "address" in the passage.

Because *Carr* and *Togawa* each fail to disclose or suggest identifying whether data is an email message corresponding to a user mailbox or address book data corresponding to a user address book, any combination of *Carr* and *Togawa* would also fail to disclose or suggest such a feature. Thus, claim 30 and its dependent claims are patentable over *Carr* in view of *Togawa*.

Claims 31-42, 44-74 and 49-51 depend from independent claims 30, 43, and 48, respectively. Given that dependent claims necessarily include the limitations of the claims from which they depend, Appellant submits that the invention as claimed in claims 31-42, 44-74 and 49-51 are similarly patentable over a combination of *Carr* and *Togawa*.

For the forgoing reasons, Appellant submits that the Examiner has failed to search and find a printed publication or patent that discloses the claimed invention as set forth in MPEP § 706.02(a).

Thus, the Examiner erred in rejecting claims 7-15 and 21-30 under 35 U.S.C. §103(a).

IX. CONCLUSION

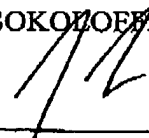
Appellant respectfully submits that all appealed claims in this application are patentable and were improperly rejected by the Examiner during prosecution before the United States Patent and Trademark Office. Appellant respectfully requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

This Brief is submitted with a check for \$500.00 to cover the appeal fee for one other than a small entity as specified in 37 C.F.R. § 1.17(c). Please charge any shortages and credit any overpayments to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: December 13, 2007



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X. APPENDIX OF CLAIMS (37 C.F.R. § 1.192(c)(9))

The claims on appeal read as follows:

30. A method comprising:
- receiving data at an interface from a service;
- identifying at the interface whether the data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book;
- applying a first set of code words to encode data in the email message; and
- applying a second set of code words to encode the address book data.
31. The method of claim 30 further comprising transmitting the encoded data in the email message from the interface to a wireless processing device.
32. The method of claim 31 further comprising transmitting the encoded data in the address book from the interface to a wireless processing device.
33. The method of claim 30 further comprising:
- identifying a header field within the email message;
- applying the first set of code words to encode data in said header field; and
- applying a third set of code words to encode data in the remainder of the email message.
34. The method of claim 33 further comprising transmitting the encoded data in the header field and the remainder of the email message from the interface to a wireless processing device.

35. The method of claim 33 further comprising transmitting only the encoded data in the header field from the interface to a wireless processing device.

36. The method as in claim 30 further comprising:

generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message; and

generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book data.

37. The method as in claim 36 wherein character strings which are relatively more common within the email message are represented by relatively shorter code words in the first set of code words and character strings which are relatively more common within the address book are represented by relatively shorter code words in said second set of code words.

38. A method comprising:

identifying at a wireless processing device whether data to be transmitted is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book;

applying a first set of code words to encode data in the email message; and

applying a second set of code words to encode the address book data;

39. The method of claim 38 further comprising the wireless processing device transmitting the encoded data in the email message to a messaging service.

40. The method of claim 38 further comprising the wireless processing device transmitting the encoded data in the address book to a messaging service.

41. The method of claim 38 further comprising:
identifying a header field within the email message;
applying the first set of code words to encode data in said header field; and
applying a third set of code words to encode data in the remainder of the email message.
42. The method as in claim 38 further comprising:
generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message; and
generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book.
43. A system comprising:
a service to provide messaging and groupware services;
an interface, coupled to receive message data from the service, including a compression module to identify whether the message data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data.
44. The system of claim 43 wherein the interface further transmits the encoded data in the email message to a wireless processing device.
45. The system of claim 43 wherein the interface further transmits the encoded data in the address book from to a wireless processing device.

46. The system of claim 43 wherein the interface further comprises a cache to store the message data.
47. The system of claim 46 wherein the cache comprises:
a first queue to store message data to be transmitted to the wireless device; and
a second queue to store message data received from the wireless device.
48. A wireless processing device comprising a compression module to identify whether message data to be transmitted to a messaging service is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data.
49. The wireless processing device of claim 48 further to transmit the encoded data in the email message to the messaging service.
50. The wireless processing device of claim 48 further to transmit the interface further transmits the encoded data in the address book from to the messaging service.
51. The wireless processing device of claim 48 further comprising.
a first queue to store message data to be transmitted to the messaging service; and
a second queue to store message data received from the messaging service.

X. EVIDENCE APPENDIX

None

XI. RELATED PROCEEDING APPENDIX

None